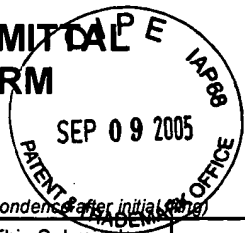
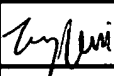


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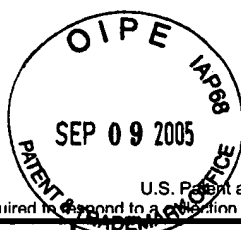
<b>TRANSMITTAL FORM</b>  <small>(to be used for all correspondence after initial filing)</small>	Application Number	09/854,362
	Filing Date	May 15, 2001
	First Named Inventor	FRANK, David G.
	Art Unit	1745
	Examiner Name	MARTIN, Angela J.
	Attorney Docket Number	9351-46/R
Total Number of Pages in This Submission		

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Request for Certificate of Correction Certificate of Correction Return Receipt Postcard
<b>Remarks</b>		<b>Certificate of Correction</b> SEP 15 2005

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm	Bereskin & Parr		
Signature			
Printed Name	Tony R. Orsi		
Date	September 8, 2005	Reg. No.	55,831

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Signature			
Typed or printed name		Date	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



PTO/SB/17 (12-04)

Approved for use through 07/31/2006. OMB 0651-0032

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Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL

## For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)

100.00

**Complete if Known**

Application Number	09/854,362
Filing Date	May 15, 2001
First Named Inventor	FRANK, David G.
Examiner Name	MARTIN, Angela J.
Art Unit	1745
Attorney Docket No.	9351-46/R

**METHOD OF PAYMENT** (check all that apply)☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify):☐ Deposit Account Deposit Account Number: 022095 Deposit Account Name: Bereskin & Parr

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

<b>Total Claims</b>	<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>	<b>Multiple Dependent Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>
- 20 or HP =	0	x	= 0.00			

HP = highest number of total claims paid for, if greater than 20

<b>Indep. Claims</b>	<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>
- 3 or HP =	0	x	= 0.00

HP = highest number of independent claims paid for, if greater than 3

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

<b>Total Sheets</b>	<b>Extra Sheets</b>	<b>Number of each additional 50 or fraction thereof</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>
- 100 =	0	/ 50 =	(round up to a whole number) x	= 0

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other: Certificate of Correction

100.00

**SUBMITTED BY**

Signature		Registration No. 55,831 (Attorney/Agent)	Telephone (416) 364-7311
Name (Print/Type)	Tony R. Orsi		Date September 8, 2005

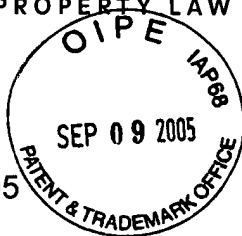
This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

SEP 09 2005

# Bereskin & Parr

INTELLECTUAL PROPERTY LAW



September 8, 2005

Tony R. Orsi  
B.A.Sc., M.A.Sc. (Elec. Eng.)  
416 957 1603 torsi@bereskinparr.com

Your Reference: 6,852,439 B2  
Our Reference: 9351-46/R

## REQUEST FOR CERTIFICATE OF CORRECTION UNDER 35 U.S.C. 255 AND 37 C.F.R. 1.323

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA  
U.S.A. 22313

Attn: Certificate of Correction Branch

Dear Sir:

**Re: United States Patent Application No. 09/854,362**  
**United States Patent No. 6,852,439 B2**  
**For: APPARATUS FOR AND METHOD OF FORMING SEALS IN FUEL CELLS**  
**AND FUEL CELL STACKS**  
**Issued: February 8, 2005**  
**Filed: May 15, 2001**  
**Applicant: FRANK, David G. et al.**  
**Examiner: MARTIN, Angela J.**

---

In accordance with the provisions of 35 U.S.C. 255 and 37 C.F.R. 1.323, please find attached a Certificate of Correction form.

The Applicant respectfully submits that the corrections are of a clerical nature and do not constitute new matter or require examination. The Applicant further submits that only a portion of the errors were made by the Applicant with the majority being made by the USPTO. In particular, the certificate requests that:

1. In the Background Of The Invention, column 2, line 19, the paragraph beginning "For the coolant, this commonly flows across the back of" be deleted.
2. In the Background Of The Invention, column 2, line 56, the first comma -,- be changed to a period .-, so that the line reads "additional 31 seals. Thus, a 30 cell stack would require a"

Scotia Plaza, 40 King Street West, 40th Floor, Toronto, Ontario, Canada M5H 3Y2  
Tel: 416.364.7311 Fax: 416.361.1398 [www.bereskinparr.com](http://www.bereskinparr.com)

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SEP 19 2005

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3. In the Background Of The Invention, column 3, line 6, the word –or- be changed to –for- so that the line reads "opportunities for mistakes to be made. Reference to a resil-"
4. In the Summary Of The Invention, column 5, line 54, the word –polysiloxane- be changed to –polysiloxane- so that the line reads "polysiloxane polymer with either terminal or pendant unsat-"
5. In the Summary Of The Invention, column 5, line 55, the equation " $-\text{CH}=\text{CH}_2$ " be changed to " $-\text{CH}=\text{CH}_2$ " so that the line reads "urated organic groups  $-\text{CH}=\text{CH}_2$ . The polysiloxane can be"
6. In the Summary Of The Invention, column 7, line 48, the colon :- be changed to a semi-colon ;-, so that the line reads "assembly; and"
7. In the Summary Of The Invention, column 8, line 7, the words –FIGS. 1b-e- be changed to –FIGS. 1b-1e- so that the line reads "FIGS. 1b-1e show variant seal arrangements for use in the"
8. In the Description of the Preferred Embodiment section, column 8, line 53, the period -.- be changed to a comma -,-, so that the line reads "In general, FIGS. 1a-3 are intended to indicate the essential"
9. In the Description of the Preferred Embodiment section, column 9, line 59, the comma -,- be deleted, so that the line reads "corresponding to plates 22 and 24 of FIG. 1a. The MEA is"
10. In the Description of the Preferred Embodiment section, column 10, line 14, the word –the- be inserted after –of-, so that the line reads "seals 52 and the exterior of the stack where the seal 54 is"
11. In the Description of the Preferred Embodiment section, column 11, line 10, the word –that- be inserted after –materials-, so that the line reads "materials that are used in fuel cells. For example, materials could"
12. In the Description of the Preferred Embodiment section, column 11, line 46, the word –is- be inserted before –also-, so that the line reads "is also anticipated that the invention could use a seal material"
13. In the Description of the Preferred Embodiment section, column 12, line 25, the word –parts- be changed to –ports-, so that the line reads "ports for supply of the necessary fluids. Air connection ports"

14. In the Description of the Preferred Embodiment section, column 12, line 28, the word ~~riot~~ be changed to ~~not~~, so that the line reads "indicated at 110, 111. Although not shown, it will be"
15. In the Description of the Preferred Embodiment section, column 12, line 37, the word ~~as~~ be inserted before ~~necessary~~, so that the line reads "of the fuel cell stack 100 to various equipment as necessary"
16. In the Description of the Preferred Embodiment section, column 12, line 41, the word ~~are~~ be changed to ~~is~~, so that the line reads "adjacent the insulators, in known manner, there is an anode"
17. In the Description of the Preferred Embodiment section, column 12, line 67, the period ~~.~~ be deleted, so that the line reads "show configurations with respectively 20 and 100 indi-"
18. In the Description of the Preferred Embodiment section, column 13, line 10, the period ~~.~~ be changed to a comma ~~,~~, so that the line reads "anode and cathode flow field plates 120, 130, indicates their"
19. In the Description of the Preferred Embodiment section, column 13, line 11, a period ~~.~~ be inserted after ~~MEA~~, so that the line reads "orientation with respect to the MEA. Thus, "front" indicates"
20. In the Description of the Preferred Embodiment section, column 13, line 35, the word ~~a~~ be inserted before ~~seal~~, so that the line reads "to accept and to define a flow of a sealant that forms a seal"
21. In the Description of the Preferred Embodiment section, column 13, line 52, the number ~~162~~ be changed to ~~152~~ so that the line reads "groove segments 152 provided around three sides, each"
22. In the Description of the Preferred Embodiment section, column 13, line 56, the period ~~.~~ be changed to a comma ~~,~~, so that the line reads "has a width of 0.200". For the groove segments 152, 154,"
23. In the Description of the Preferred Embodiment section, column 14, line 15, the word ~~air~~ be deleted, so that the line reads "Around the aperture 136, there are groove segments 164"
24. In the Description of the Preferred Embodiment section, column 15, line 22, the word ~~front~~ be deleted, and the word ~~cathode~~ be changed to ~~anode~~, so that the line reads "rear face of the anode flow field plate 120."
25. In the Description of the Preferred Embodiment section, column 15, line 24, the word ~~anode~~ be changed to ~~cathode~~, so that the line reads "nate the different groove segments of the anode and cathode"

26. In the Description of the Preferred Embodiment section, column 17, line 28, a period -.- be inserted at the end of the sentence, after -detached-, so that the line reads "seal material supply is detached."
27. In the Description of the Preferred Embodiment section, column 18, line 5, the letter -s- be changed to the word -is-, so that the line reads "itself. To form a complete fuel cell assembly, it is simply a"
28. In the Description of the Preferred Embodiment section, column 18, line 6, the word -MEUs- be changed to -MEU's-, so that the line reads "matter of selecting the desired number of MEU's, clamping"
29. In the Description of the Preferred Embodiment section, column 18, line 12, the word -end- be changed to -and-, so that the line reads "coolant ports and channels within the entire assembly. This"
30. In the Description of the Preferred Embodiment section, column 18, line 14, the word -MFU- be changed to -MEU-, so that the line reads "from a single basic unit, identified as an MEU. It is noted,"
31. In the Description of the Preferred Embodiment section, column 18, line 42, a period -.- be inserted after -uniform-, so that the line reads "seal material is uniform. This may not occur in practice. For"
32. In the Description of the Preferred Embodiment section, column 18, lines 44-46, the words -lead to distortions in flow rates of the seal material on the two sides of the MEA, which will- be deleted, so that the lines read "sections on either side will distort. This will only cause the distortion to increase. Thus,"
33. In the Description of the Preferred Embodiment section, column 18, line 50, the words "1i-1e" be changed to "1b-1e", so that the line reads "also anticipates variants, shown in FIGS. 1b-1e. These are"
34. In the Description of the Preferred Embodiment section, column 19, line 33, a period -.- be inserted after -31e-, so that the line reads "peripheries as indicated at 31e. The grooves 28e, 30e are then"
35. In the Description of the Preferred Embodiment section, column 20, line 5, the word -from- be changed to -form-, so that the line reads "form one end of the stack 100. As such, it may take some"
36. In the Description of the Preferred Embodiment section, column 21, line 25, the words -organo siloxane- become one word -organosiloxane-, so that the line reads "elastomeric seal material, which is an organosiloxane"

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37. In the Description of the Preferred Embodiment section, column 21, line 46, a period -.- be inserted after -ingredient-, so that the line reads "million parts by weight of ingredient."
38. In the Description of the Preferred Embodiment section, column 21, line 67, the word -carbons- be changed to -carbon-, so that the line reads "include alkyls comprising one to 20 carbon atoms such as"
39. In the Description of the Preferred Embodiment section, column 22, line 49, the word -trichlorosilane- be changed to -trichlorosilane-, so that the line reads "chloride or trichlorosilane as taught by Spialter et al. U.S."
40. In the Description of the Preferred Embodiment section, column 23, line 20, the word -methylotrifluoropropyl- be changed to -methyltrifluoropropyl-, so that the line reads "the mole percent of methyltrifluoropropyl is greater than"
41. In the Description of the Preferred Embodiment section, column 23, line 28, the words -platinum-group- be changed to -platinum group-, so that the line reads "The platinum group catalyst, is a catalyst for curing the"
42. In the Description of the Preferred Embodiment section, column 23, line 37, the word -part- be changed to -parts-, so that the line reads "parts, the curing reaction may not proceed sufficiently; if the"
43. In the Description of the Preferred Embodiment section, column 23, line 56, brackets be inserted around the letter -F-, so that the line reads "Ingredient (F) consists of a suitable organic peroxide curing"
44. In the Description of the Preferred Embodiment section, column 24, line 3, the word -sufficient- be deleted, so that the line reads "Optionally an inhibitor to allow the composition"
45. In the Description of the Preferred Embodiment section, column 24, line 5, the word -As- be changed to -as-, so that the line reads "be necessary, as exemplified by alkyne alcohols such as"
46. In the Description of the Preferred Embodiment section, column 24, line 31, the word -metric- be changed to -meric- and a comma -,- be inserted after -material-, so that the line reads "meric seal material, will be explained in more detail with"
47. In the Description of the Preferred Embodiment section, column 24, line 55, the first instance of the word -an- be changed to -a-, so that the line reads "has a viscosity of 41 cp; 40 parts quartz silica with an"

SEP 19 2005

48. In the Description of the Preferred Embodiment section, column 25, line 13, the word –dimethylpolyiloxane- be changed to –dimethylpolysiloxane-, so that the line reads "above); 56 parts dimethylpolysiloxane that is dimethylvinyl-"
49. In the Description of the Preferred Embodiment section, column 25, line 23, the degrees symbol -°- be inserted after -23-, so that the line reads "128,000 cp at 23° C."
50. In the Description of the Preferred Embodiment section, column 25, line 36, the word –dimethylpolyiloxane- be changed to –dimethylpolysiloxane-, so that the line reads "above); 55 parts dimethylpolysiloxane that is dimethylvinyl-"
51. In the Description of the Preferred Embodiment section, column 26, line 32, a comma -, be inserted after –GDM-, so that the line reads "and GDM, making sure that the apertures for flowing seal"
52. In the Description of the Preferred Embodiment section, column 26, line 46, the word –Into- be changed to –into-, so that the line reads "extend to screw into the anode end plate 102; 13), tighten the"
53. In the Description of the Preferred Embodiment section, column 29, line 1, the word –polydimethylsiloxaxane- be changed to –polydimethylsiloxane-, so that the line reads "100 parts of a polydimethylsiloxane which is dimethylvi-"
54. In the Description of the Preferred Embodiment section, column 29, line 2, the word –methyltrifluoropropyl- be changed to –methyltrifluoropropyl-, so that the line reads "nylsiloxy terminated, is 40 mole % methyltrifluoropropyl,"
55. In the Description of the Preferred Embodiment section, column 29, line 26, the word –Trifluoropropylmethyl- be changed to –Trifluoropropylmethyl-, so that the line reads "110.0 Dimethyl, Trifluoropropylmethyl Siloxane, Dimethylvinylsiloxy-"
56. In the Description of the Preferred Embodiment section, column 29, line 40, the word –and- be added before the word –were-, so that the line reads "treated with 6.4 parts hexamethyldisilazane and were blended"
57. In the Description of the Preferred Embodiment section, column 29, line 44, the word –dimethylvinylsiloxy- be changed to –dimethylsiloxy-, so that the line reads "polydimethylsiloxane which is dimethylsiloxy"
58. In the Description of the Preferred Embodiment section, column 29, line 52, the words –or composition- be deleted, so that the line reads "until homogeneity. The final material was a"

SEP 19 2005



59. In the Description of the Preferred Embodiment section, column 29, line 54, the number -22- be changed to -225-, so that the line reads "orifice at a rate of 225 g/min under 90 psig pressure."
60. In the Description of the Preferred Embodiment section, column 30, line 27, the word -Alter- be changed to -After-, so that the line reads "for the seal materials listed previously. After 1 month of"
61. In the Description of the Preferred Embodiment section, column 31, line 25, the number -38- be changed to -3.8-, so that the line reads "had a viscosity of 1500 cst; 3.8 parts of dimethyl,"
62. In the Description of the Preferred Embodiment section, column 31, line 27, the word -arid- be changed to -and-, so that the line reads "atom-bonded hydrogen atoms and a viscosity of 25 cp; and"
63. In the Claims section, column 32, line 56, claim 9, the word -elastometric- be changed to -elastomeric-, so that the line reads "grooves for the elastomeric seal material that fills the"
64. In the Claims section, column 34, line 13, claim 19, the word -aperture- be changed to -apertures-, so that the line reads "each element includes at least two connection apertures and"
65. In the Claims section, column 34, line 40, claim 23, the words -at least one groove- should begin on a new line, so that lines 40 and 41 are "a plurality of separate elements;  
at least one groove network extending through the electrochemical cell"

The government fee of \$100.00 is included in our cheque no. 7692. Please charge any deficiency or credit any overpayment to our deposit account no. 02-2095

Respectfully submitted,



Tony R. Orsi  
Registration No. 55,831  
/cem  
Encl.

SEP 19 2005

## UNITED STATES PATENT AND TRADEMARK OFFICE

### CERTIFICATE OF CORRECTION

PATENT NO : 6,852,439 B2

Page 1 of 6

APPLICATION NO. : 09/854,362

ISSUE DATE : February 8, 2005

INVENTOR(S) : FRANK, David G. et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the Background Of The Invention, column 2, line 19, the paragraph beginning "For the coolant, this commonly flows across the back of" has been deleted.

In the Background Of The Invention, column 2, line 56, the first comma -,- has been changed to a period .-, so that the line reads "additional 31 seals. Thus, a 30 cell stack would require a"

In the Background Of The Invention, column 3, line 6, the word -or- has been changed to -for- so that the line reads "opportunities for mistakes to be made. Reference to a resil-

In the Summary Of The Invention, column 5, line 54, the word -polysiloxane- has been changed to -polysiloxane- so that the line reads "polysiloxane polymer with either terminal or pendant unsat-

In the Summary Of The Invention, column 5, line 55, the equation "-CH==CH2" has been changed to "-CH=CH2" so that the line reads "urated organic groups -CH=CH2. The polysiloxane can be"

In the Summary Of The Invention, column 7, line 48, the colon :- has been changed to a semi-colon ;-, so that the line reads "assembly; and"

In the Summary Of The Invention, column 8, line 7, the words -FIGS. 1b-e- have been changed to -FIGS. 1b-1e- so that the line reads "FIGS. 1b-1e show variant seal arrangements for use in the"

In the Description of the Preferred Embodiment section, column 8, line 53, the period .- has been changed to a comma ,-, so that the line reads "In general, FIGS. 1a-3 are intended to indicate the essential"

In the Description of the Preferred Embodiment section, column 9, line 59, the comma -,- has been deleted, so that the line reads "corresponding to plates 22 and 24 of FIG. 1a. The MEA is"

In the Description of the Preferred Embodiment section, column 10, line 14, the word -the- has been inserted after -of-, so that the line reads "seals 52 and the exterior of the stack where the seal 54 is"

In the Description of the Preferred Embodiment section, column 11, line 10, the word -that- has been inserted after -materials-, so that the line reads "materials that are used in fuel cells. For example, materials could"

**MAILING ADDRESS OF SENDER (Please do not use customer number below):**

Bereskin & Parr  
Box 401, 40 King Street West  
Toronto, Ontario, M5H 3Y2, Canada

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

SEP 19 2005

## UNITED STATES PATENT AND TRADEMARK OFFICE

### CERTIFICATE OF CORRECTION

PATENT NO : 6,852,439 B2

Page 2 of 6

APPLICATION NO. : 09/854,362

ISSUE DATE : February 8, 2005

INVENTOR(S) : FRANK, David G. et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the Description of the Preferred Embodiment section, column 11, line 46, the word ~~is~~ has been inserted before ~~also~~, so that the line reads "is also anticipated that the invention could use a seal material"

In the Description of the Preferred Embodiment section, column 12, line 25, the word ~~parts~~ has been changed to ~~ports~~, so that the line reads "ports for supply of the necessary fluids. Air connection ports"

In the Description of the Preferred Embodiment section, column 12, line 28, the word ~~riot~~ has been changed to ~~not~~, so that the line reads "indicated at 110, 111. Although not shown, it will be"

In the Description of the Preferred Embodiment section, column 12, line 37, the word ~~as~~ has been inserted before ~~necessary~~, so that the line reads "of the fuel cell stack 100 to various equipment as necessary"

In the Description of the Preferred Embodiment section, column 12, line 41, the word ~~are~~ has been changed to ~~is~~, so that the line reads "adjacent the insulators, in known manner, there is an anode"

In the Description of the Preferred Embodiment section, column 12, line 67, the period ~~.~~ has been deleted, so that the line reads "show configurations with respectively 20 and 100 indi"

In the Description of the Preferred Embodiment section, column 13, line 10, the period ~~.~~ has been changed to a comma ~~,~~, so that the line reads "anode and cathode flow field plates 120, 130, indicates their"

In the Description of the Preferred Embodiment section, column 13, line 11, a period ~~.~~ has been inserted after ~~MEA~~, so that the line reads "orientation with respect to the MEA. Thus, "front" indicates"

In the Description of the Preferred Embodiment section, column 13, line 35, the word ~~a~~ has been inserted before ~~seal~~, so that the line reads "to accept and to define a flow of a sealant that forms a seal"

In the Description of the Preferred Embodiment section, column 13, line 52, the number ~~162~~ has been changed to ~~152~~ so that the line reads "groove segments 152 provided around three sides, each"

In the Description of the Preferred Embodiment section, column 13, line 56, the period ~~.~~ has been changed to a comma ~~,~~, so that the line reads "has a width of 0.200". For the groove segments 152, 154,"

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19 2005

## UNITED STATES PATENT AND TRADEMARK OFFICE

### CERTIFICATE OF CORRECTION

PATENT NO : 6,852,439 B2

Page 3 of 6

APPLICATION NO. : 09/854,362

ISSUE DATE : February 8, 2005

INVENTOR(S) : FRANK, David G. et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the Description of the Preferred Embodiment section, column 14, line 15, the word -air- has been deleted, so that the line reads "Around the aperture 136, there are groove segments 164"

In the Description of the Preferred Embodiment section, column 15, line 22, the word -front- has been deleted, and the word -cathode- be changed to -anode-, so that the line reads "rear face of the anode flow field plate 120."

In the Description of the Preferred Embodiment section, column 15, line 24, the word -anode- has been changed to -cathode-, so that the line reads "note the different groove segments of the anode and cathode"

In the Description of the Preferred Embodiment section, column 17, line 28, a period -.- has been inserted at the end of the sentence, after -detached-, so that the line reads "seal material supply is detached."

In the Description of the Preferred Embodiment section, column 18, line 5, the letter -s- has been changed to the word -is-, so that the line reads "itself. To form a complete fuel cell assembly, it is simply a"

In the Description of the Preferred Embodiment section, column 18, line 6, the word -MEUs- has been changed to -MEU's-, so that the line reads "matter of selecting the desired number of MEU's, clamping"

In the Description of the Preferred Embodiment section, column 18, line 12, the word -end- has been changed to -and-, so that the line reads "coolant ports and channels within the entire assembly. This"

In the Description of the Preferred Embodiment section, column 18, line 14, the word -MFU- has been changed to -MEU-, so that the line reads "from a single basic unit, identified as an MEU. It is noted,"

In the Description of the Preferred Embodiment section, column 18, line 42, a period -.- has been inserted after -uniform-, so that the line reads "seal material is uniform. This may not occur in practice. For"

In the Description of the Preferred Embodiment section, column 18, lines 44-46, the words -lead to distortions in flow rates of the seal material on the two sides of the MEA, which will- have been deleted, so that the lines read "sections on either side will distort. This will only cause the distortion to increase. Thus,"

In the Description of the Preferred Embodiment section, column 18, line 50, the words "1i-1e" have been changed to "1b-1e", so that the line reads "also anticipates variants, shown in FIGS. 1b-1e. These are"

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## UNITED STATES PATENT AND TRADEMARK OFFICE

### CERTIFICATE OF CORRECTION

PATENT NO : 6,852,439 B2

Page 4 of 6

APPLICATION NO. : 09/854,362

ISSUE DATE : February 8, 2005

INVENTOR(S) : FRANK, David G. et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the Description of the Preferred Embodiment section, column 19, line 33, a period -.- be inserted after -31e-, so that the line reads "peripheries as indicated at 31e. The grooves 28e, 30e are then"

In the Description of the Preferred Embodiment section, column 20, line 5, the word -from- has been changed to -form-, so that the line reads "form one end of the stack 100. As such, it may take some"

In the Description of the Preferred Embodiment section, column 21, line 25, the words -organo siloxane- have become one word -organosiloxane-, so that the line reads "elastomeric seal material, which is an organosiloxane"

In the Description of the Preferred Embodiment section, column 21, line 46, a period -.- has been inserted after -ingredient-, so that the line reads "million parts by weight of ingredient."

In the Description of the Preferred Embodiment section, column 21, line 67, the word -carbons- has been changed to -carbon-, so that the line reads "include alkyls comprising one to 20 carbon atoms such as"

In the Description of the Preferred Embodiment section, column 22, line 49, the word -trichlorosilane- has been changed to -trichlorosilane-, so that the line reads "chloride or trichlorosilane as taught by Spialter et al. U.S."

In the Description of the Preferred Embodiment section, column 23, line 20, the word -methylotrifluoropropyl- has been changed to -methyltrifluoropropyl-, so that the line reads "the mole percent of methyltrifluoropropyl is greater than"

In the Description of the Preferred Embodiment section, column 23, line 28, the words -platinum-group- have been changed to -platinum group-, so that the line reads "The platinum group catalyst, is a catalyst for curing the"

In the Description of the Preferred Embodiment section, column 23, line 37, the word -part- has been changed to -parts-, so that the line reads "parts, the curing reaction may not proceed sufficiently; if the"

In the Description of the Preferred Embodiment section, column 23, line 56, brackets have been inserted around the letter -F-, so that the line reads "Ingredient (F) consists of a suitable organic peroxide curing"

In the Description of the Preferred Embodiment section, column 24, line 3, the word -sufficient- has been deleted, so that the line reads "Optionally an inhibitor to allow the composition"

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## UNITED STATES PATENT AND TRADEMARK OFFICE

### CERTIFICATE OF CORRECTION

PATENT NO : 6,852,439 B2

Page 5 of 6

APPLICATION NO. : 09/854,362

ISSUE DATE : February 8, 2005

INVENTOR(S) : FRANK, David G. et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the Description of the Preferred Embodiment section, column 24, line 5, the word -As- has been changed to -as-, so that the line reads "be necessary, as exemplified by alkyne alcohols such as"

In the Description of the Preferred Embodiment section, column 24, line 31, the word -metric- has been changed to -meric- and a comma -,- be inserted after -material-, so that the line reads "meric seal material, will be explained in more detail with"

In the Description of the Preferred Embodiment section, column 24, line 55, the first instance of the word -an- has been changed to -a-, so that the line reads "has a viscosity of 41 cp; 40 parts quartz silica with an"

In the Description of the Preferred Embodiment section, column 25, line 13, the word -dimethylpolyiloxane- has been changed to -dimethylpolysiloxane-, so that the line reads "above); 56 parts dimethylpolysiloxane that is dimethylvinyl-"

In the Description of the Preferred Embodiment section, column 25, line 23, the degrees symbol -°- has been inserted after -23-, so that the line reads "128,000 cp at 23° C."

In the Description of the Preferred Embodiment section, column 25, line 36, the word -dimethylpolyiloxane- has been changed to -dimethylpolysiloxane-, so that the line reads "above); 55 parts dimethylpolysiloxane that is dimethylvinyl-"

In the Description of the Preferred Embodiment section, column 26, line 32, a comma -,- has been inserted after -GDM-, so that the line reads "and GDM, making sure that the apertures for flowing seal"

In the Description of the Preferred Embodiment section, column 26, line 46, the word -Into- has been changed to -into-, so that the line reads "extend to screw into the anode end plate 102; 13), tighten the"

In the Description of the Preferred Embodiment section, column 29, line 1, the word -polydimethylsiloxaxane- has been changed to -polydimethylsiloxane-, so that the line reads "100 parts of a polydimethylsiloxane which is dimethylvi-"

In the Description of the Preferred Embodiment section, column 29, line 2, the word -methyltrifluoropropyl- has been changed to -methyltrifluoropropyl-, so that the line reads "nylsiloxy terminated, is 40 mole % methyltrifluoropropyl,"

In the Description of the Preferred Embodiment section, column 29, line 26, the word -Trifluoropropylmethyl- has been changed to -Trifluoropropylmethyl-, so that the line reads "110.0 Dimethyl, Trifluoropropylmethyl Siloxane, Dimethylvinylsiloxy-"

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Page 6 of 6

APPLICATION NO. : 09/854,362

ISSUE DATE : February 8, 2005

INVENTOR(S) : FRANK, David G. et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the Description of the Preferred Embodiment section, column 29, line 40, the word –and- has been added before the word –were-, so that the line reads "treated with 6.4 parts hexamethyldisilazane and were blended"

In the Description of the Preferred Embodiment section, column 29, line 44, the word –dimethylvinylsiloxo- has been changed to –dimethylsiloxo-, so that the line reads "polydimethylsiloxane which is dimethylsiloxo"

In the Description of the Preferred Embodiment section, column 29, line 52, the words –or composition- have been deleted, so that the line reads "until homogeneity. The final material was a"

In the Description of the Preferred Embodiment section, column 29, line 54, the number -22- has been changed to -225-, so that the line reads "orifice at a rate of 225 g/min under 90 psig pressure."

In the Description of the Preferred Embodiment section, column 30, line 27, the word –Alter- has been changed to –After-, so that the line reads "for the seal materials listed previously. After 1 month of"

In the Description of the Preferred Embodiment section, column 31, line 25, the number -38- has been changed to -3.8-, so that the line reads "had a viscosity of 1500 cst; 3.8 parts of dimethyl,"

In the Description of the Preferred Embodiment section, column 31, line 27, the word –arid- has been changed to –and-, so that the line reads "atom-bonded hydrogen atoms and a viscosity of 25 cp; and"

In the Claims section, column 32, line 56, claim 9, the word –elastometric- has been changed to –elastomeric-, so that the line reads "grooves for the elastomeric seal material that fills the"

In the Claims section, column 34, line 13, claim 19, the word –aperture- has been changed to –apertures-, so that the line reads "each element includes at least two connection apertures and"

In the Claims section, column 34, line 40, claim 23, the words –at least one groove- now begins on a new line, so that lines 40 and 41 are "a plurality of separate elements;  
at least one groove network extending through the electrochemical cell"

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